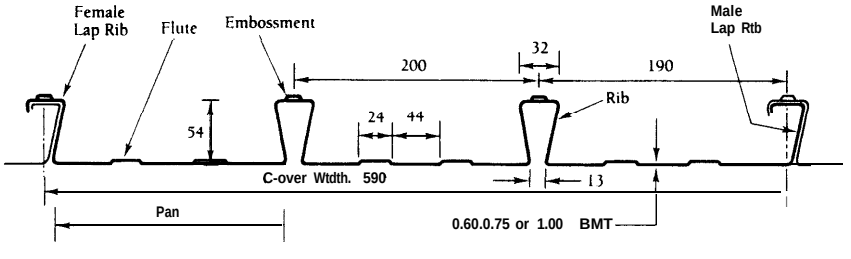
BHP

Bondek - Structural Formwork
Quick Reference



BHP Buildin gproduct s offers the BONDEK II range of structural formwork for all types of projects:

- Domestic
- Commercial
- Industrial

The Bondek II system:

- Is more economical than conventiona l formwork
- Is fast to construct
- Allows easy fixing of ceilings

Bondek structural formwork

- Acts as formwork
- Replaces bottom reinforcement

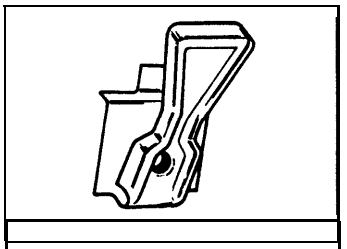
Table 1: Bondek Technical Data

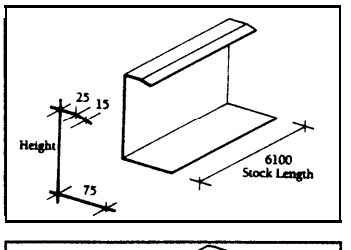
Bondek Designation	Gauge BMT (mm)	Zinc Coating (g/m2)	Weight Area (kg/m2)	Weight Linear (kg/m)	Coverage (m2/t)
Domestic Bondek	0.60	Z350	8.52	5.03	117.37
0.75 Bondek II	0.75	Z350	10.50	6.20	95.24
1 .OO Bondek II	1.00	Z350	13.79	8.14	72.52

Bondek is roll-formed from hot-dipped, zinc-coated high-tensile BHP Zinc Hi-Ten steel strip, conforming to AS 1397 grade G550 MPa.

Complete Range of Accessories

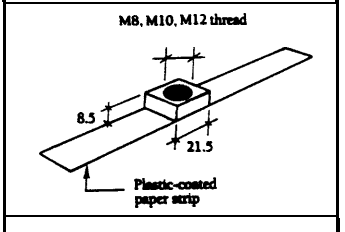
Bonwedge - A lightweight pressed metal wedge shaped bracket, which can be inserted into the Bondek ribs to support rods which carry suspended ceilings or services. Suits a 6 mm rod. Maximum allowable load 100 kg.

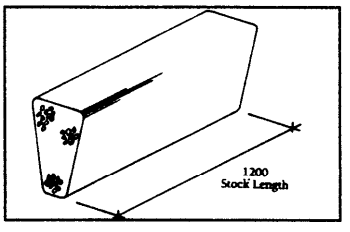




Edge Form - A galvanised steel edge form. Available in standard slab depths of 100,125 & 150 mm. other depths are available on request.

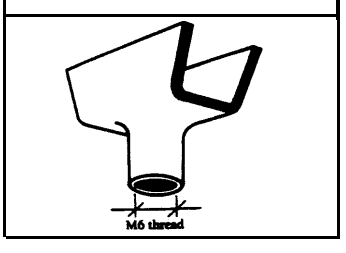
Bon-Nut - A heavy duty square nut adhered to paper for easy installation into the Bondek ribs, to carry suspended ceilings & services. Available to sui tM8, Ml0 & Ml2 threaded rod. Maximum allowable load 430 kg.

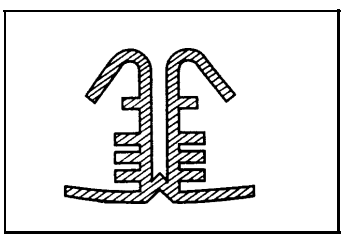




Bonfill - A rib infill made from polystyrene, inserted into the Bondek ribs a tsupp ort sto reduce concrete leakag & airflow.

Ceiling Suspension Nut - A lightweight pressed metal suspension nut, which is inserted into the Bondek rib to support a M6 threaded rod to carry suspended ceilings or services. Maximum allowable load 270 kg.





Bonstri p - A structural plasti cinfii strip which is inserted into the Bondek rib and allows direct fixing of plasterboard ceilings up to 16 mm thick

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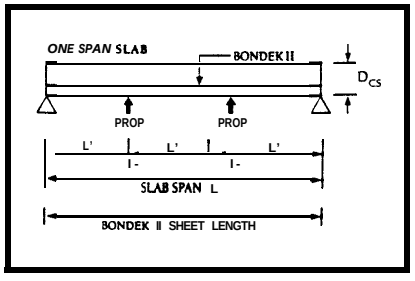
Bondek Formwork Quick Selection Tables

Span Configurations

Single Span Slab



Continuous Span Slab

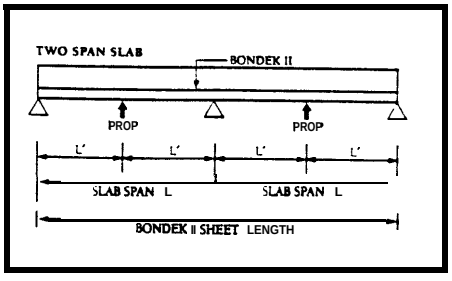


Table 2 - Maximum Unpropped Spans (mm) For Single Spans

Slab Depth (mm)	Exposed Soffits (L/240) Bondek Thickness 0.60	0.75	1.0	Concealed Soffits (L/150) Bondek Thickness 0.60	0.75	1.00
90	1940	2160	2360	2230	2470	2700
100	1880	2090	2290	2170	2400	2620
120	1790	1980	2170	2060	2280	2500
140	1700	1850	2070	1960	2170	2390
150	1660	1780	2030	1920	2120	2350
170	1550	1680	1940	1850	2030	2250
200	1430	1550	1790	1750	1920	2150
220	1370	1480	1720	1690	1850	2090

Table 3 - Maximum Bondek Span L (mm) For Continuous Sheet Lengths Over Two Or More Spans For Exposed Soffits (L/240)

Slab Depth (mm)	Bondek Thickness / Number of Rows of Props 0.60 1	2	0.75 1	2	1.00 1	2
90	3600	3600	3600	3600	3600	3600
100	4000	4000	4000	4000	4000	4000
120	4120	4800	4800	4800	4800	4800
140	3930	5600	4520	5600	5020	5600
150	3850	5780	4380	6000	4920	6000
170	3680	5530	4120	6180	4730	6500
200	3400	5100	3810	5710	4400	6500
220	3240	4860	3630	5450	4200	6300

Table 4 - Maximum Bondek Span L (mm) For Continuous Sheet Lengths Over Two Or More Spans For Concealed Soffits (L/150)

Slab Depth (mm)	Bondek Thickness / Number of Rows of Props 0.60 1	2	0.75 1	2	1.00 1	2
90	3600	3600	3600	3600	3600	3600
100	4000	4000	4000	4000	4000	4000
120	4120	4800	4800	4800	4800	4800
140	3930	5600	4730	5600	5600	5600
150	3850	5780	4630	6000	5680	6000
170	3700	5550	4440	6500	5480	6500
200	3500	5260	4190	6290	5220	6500
220	3390	5090	4050	6080	5070	6500

General Notes:

1. Slab spanL= clear span+50 mm
2. Bonek is designed as formwork for two stages of construction:
   Stage 1, prior to placement of concrete.
   Stage 2, during the placement of concrete until the concrete has hardened.
3. The following deflection limits under wet concrete are recommended.
   Exposed soffits L/240 for exposed soffits where good general alignment is required for a soffit that is visible after construction.
   Concealed soffit s U150 for concealed soffits where visual quaiity is not important, that is the soffit will not be seen after construction.
3. Sheeting dead load, g_b = $0.13t_{bm}$ kPa
4. Conrete dead load, pg=25kN/m3 (an allowance of 100 kg/m3 has been made for the weight of reinforcement)
5. Ponding dead load - the additional concrete due to ponding of the concrete from the sheeting deflection has been included.
6. Live load due to weight of workman and equipment allowed = 1.0 kPa
7. No allowance for stacked materials has been made.
8. Concentrated live load to due mounding of concrete q_c = 3.0 kPa during stage 2 only and distributed anywhere along a length of 1.6m in the spanning direction
9. Prop lines are positioned at equal spacing L Within span L
10. The information contained in this publication is intended for guidance only.
11. Further detail should be sought from the Bondek II literature or consulting your nearest BHP Building Products Service Centre.

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